

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-4 (Canceled).

5. (Currently Amended) A flaw inspection method by liquid penetrant testing, comprising:

illuminating a surface of a sample to be inspected with polarized light;
obtaining an image of the surface illuminated with the polarized light by a color camera;

extracting a flaw candidate from the detected image of the surface by processing the ~~obtained~~ image obtained by the color camera; and

displaying an image of the extracted flaw candidate[[.]] wherein, in the extracting step, said image obtained by said color camera is processed by calibrating said image by using a parameter unique to said color camera which is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

6. (Currently Amended) The flaw inspection method according to claim 5, wherein, in the step of extracting, a chromaticity of the obtained image is converted by using [[a]] said parameter.

7. (Canceled).

8. (Original) The flaw inspection method according to claim 5, wherein the image displayed is associated with a positional information.

9. (Original) The flaw inspection method according to claim 8, wherein the positional information is obtained with the image in the obtaining step.

10. (Original) The flaw inspection method according to claim 5, further comprising:

detecting a flaw from the extracted flaw candidate; and
storing an image of the detected flaw into memory.

11. (Currently Amended) A flaw inspection method, comprising ~~the steps of~~:
illuminating a surface of a sample to be inspected with light;
obtaining an image of the surface by using a color camera;
extracting a flaw candidate of the inspected surface by processing the ~~obtained~~
image obtained by said color camera;

storing an image of the detected flaw into memory[[.]] ; wherein, in the extracting step, said image obtained by said color camera is processed by calibrating said image by using a parameter unique to said color camera which is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

12. (Original) The flaw inspection method according to the claim 11,
further comprising:

re-displaying the stored flaw image.

13. (Original) The flaw inspection method according to the claim 11,
wherein the light illuminating the sample surface is polarized light.

14. (Original) The flaw inspection method according to the claim 11,
wherein the light illuminating the sample surface is ultra violet light.

15. (Canceled).

16. (Original) The flaw inspection method according to the claim 11,
wherein the image in the displaying step is displayed on a screen together with a positional
information.

17. (Currently Amended) The flaw inspection according to the claim 11,
wherein a chromaticity of the image displayed in the displaying step is converted from the image
of the detecting step by using a said parameter unique to the color ~~video~~ camera.

18. (Original) The flaw inspection method according to the claim 11,
wherein the image of the flaw candidate is displayed on a screen distinguishable from others.

19. (Currently Amended) A flaw inspection method, comprising:
obtaining an image of a surface of a surface of an object to be inspected by using
a color camera;

detecting a flaw from the ~~obtained~~ image obtained by said color camera;

displaying the detected flaw image on a screen; and
storing the displayed flaw image on a screen distinguishable from other part of the
object [[.]],

wherein, in the detecting step, said image obtained by said color camera is
processed by calibrating said image using a parameter calculated from an image of a color chart
for calibration which contains white, pink and red picked up by said color camera.

20. (Original) The flaw inspection method according to the claim 19,
further comprising:

illuminating the object with a polarized light.

21. (Original) The flaw inspection method according to the claim 19,
further comprising:

illuminating the object with an ultra violet light.

22. (Currently Amended) The flaw inspection method according to the claim
19, wherein the image is detected by using a color video camera in the obtaining step.

23. (Currently Amended) The flaw inspection method according to the claim
19, wherein the detected flaw image is displayed on a screen together with a positional
information in the displaying step.

24. (Currently Amended) A flaw inspection apparatus based on flaw testing,
comprising:

illumination means for illuminating a surface of a sample to be inspected;

a color video camera which obtains an image of the surface;

flaw candidate extraction means for extracting a flaw candidate of the surface
from the image obtained by said color video camera;

display means for displaying an image of the extracted flaw candidate extracted
by said flaw candidate extraction means;

flaw detection means which detects a flaw from the displayed flaw candidate; and

memory means for storing the image of the flaw detected by the flaw detection
means[[.]].

wherein, in the extracting step, said image obtained by said color camera is processed by calibrating said image by using a parameter unique to said color camera which is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

25. (Original) The flaw inspection apparatus according to claim 24, wherein the display means displaying the image of the flaw candidate accompanied with a positional information.

26. (Currently Amended) A flaw inspection apparatus based on flaw testing, comprising:

a light source which illuminates a surface of a sample to be inspected;

a color ~~videø~~ camera which obtains an image of the surface;

a chromaticity converter which converts a chromaticity of the image obtained by the color ~~videø~~ camera by using a conversion coefficient which is unique to the color ~~videø~~ camera;

a flaw candidate extractor which extracts a flaw candidate of the surface from the image obtained by said color ~~videø~~ camera which chromaticity is converted by the chromaticity converter;

a display which displays on a screen an image of the extracted flaw candidate which chromaticity is converted;

a flaw detector which detects a flaw from the displayed flaw candidate; and

a memory which stores the image of flaw detected by the flaw detector[[.]],

wherein, said conversion coefficient of said chromaticity converter is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

27. (Currently Amended) The flaw inspection apparatus according to claim 26, wherein said chromaticity converter obtains conversion coefficients for converting RGB (Red, Green and Blue) chromaticity values unique to said color ~~videø~~ camera into reference xy chromaticity values.

28. (Currently Amended) A computer memory storing code for a flaw inspection method using an object to be inspected, wherein said computer memory comprises:
code for obtaining an image of a surface of the object by a color camera;
code for converting a chromaticity of the ~~obtained~~ image obtained by said color camera to extract a flaw candidate;
code for detecting a flaw from the extracted flaw candidate; and
code for displaying the detected flaw image on a screen[[.]],
wherein, said code for converting the chromaticity of the obtained image is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

29. (Currently Amended) A computer memory storing code for a flaw inspection method using an object to be inspected, wherein said computer memory comprises:
code for obtaining an image of a surface of the object by a color camera;
code for converting a chromaticity of the ~~obtained~~ image obtained by said color camera;
code for displaying on a screen an image of the object which chromaticity is converted from the obtained image;
code for indicating a flaw candidate on the screen; and
code for displaying a flaw image on a screen detected from the candidate[[.]],
wherein, said code for converting the chromaticity of the obtained image is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

30. (new) A flaw inspection method by liquid penetrant testing, the method comprising:
illuminating a surface of a sample to be inspected with polarized light;
obtaining an image of the surface illuminated with the polarized light by a color camera;
processing the image obtained by the color camera; and
displaying an image processed by said processing step,

wherein, in the processing step, said image obtained by said color camera is processed by calibrating said image by using a parameter unique to said color camera which is calculated from data of an image of a color chart for calibration which contains white, pink and red picked up by said color camera.

31. (New) A flaw inspection method according to the claim 30, wherein said parameter is unique to said color camera.

32. (New) A flaw inspection method according to the claim 30, wherein in the step of processing, a flaw candidate is extracting from the image, and in the displaying step, said extracted flaw candidate image is displayed.

33. (New) A flaw inspection method according to the claim 30, wherein in the displaying step, said image is displayed associated with positional information.

34. (New) A flaw inspection method according to the claim 30, further comprising:

storing said image processed by said processing step in a memory.

35. (New) A flaw inspection method by liquid penetrant testing, the method comprising:

illuminating a surface of a sample to be inspected with polarized light;

obtaining an image of the surface illuminated with the polarized light by a color camera;

processing the image obtained by the color camera; and

displaying an image processed by said processing step,

wherein, in the processing step, a chromaticity of said image obtained by said color camera is converted by using a parameter unique to said color camera which is calculated from data of a color chart image picked up by said color camera and said color chart includes white, pink and red components.

36. (New) A flaw inspection method according to claim 35, wherein in the processing step, a flaw candidate is extracted from the image, and in the displaying step, said extracted flaw candidate image is displayed.

37. (New) A flaw inspection method according to claim 35, further comprising:

storing said image processed by said processing step in a memory device.

38. (New) A flaw inspection method according to claim 35, wherein in the displaying step, said image is displayed associated with positional information.

39. (New) A flaw inspection method according to claim 35, further comprising:

storing an image of the detected flaw into a memory component.